

T03D03 – (3.1) The Periodic Table

Name _____

1. 3.1.1 Describe the arrangement of elements in the periodic table in order of increasing atomic number. (2)
- a. Restate the Periodic Law:

b. How did Mendeleev organize the periodic table?

2. 3.1.2 Distinguish between the terms group and period. (2)

PERIODS -
SIMILARITIES: THE NUMBER OF OUTER ELECTRON SHELLS.

GROUPS -
SIMILARITIES: THE NUMBER OF ELECTRONS IN THE OUTER SHELL; COMMON REACTIVITY, BONDING, CHEMICAL AND PHYSICAL PROPERTIES.

3. 3.1.3 Apply the relationship between the electron arrangement of elements and their position in the periodic table up to $Z = 20$. (2)

a. The placement in the periodic table and the electron arrangement can easily be related below:

1						2	
2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8
2.8.1	2.8.2	2.8.3	2.8.4	2.8.5	2.8.6	2.8.7	2.8.8
2.8.8.1	2.8.8.2						

4. 3.1.4 Apply the relationship between the number of electrons in the highest occupied energy level for an element and its position in the periodic table. (2)

a. Reference to 3(a).